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Site ID: 10572

# Department of Environmental Quality

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DIVISION OF AIR QUALITY Richard W. Sprott *Director* 

# **Title V Operating Permit**

PERMIT NUMBER: 3500346001 DATE OF PERMIT: February 25, 2000 Date of Last Revision: July 22, 2004

This Operating Permit is issued to, and applies to the following:

Name of Permittee: Permitted Location:

Kennecott Utah Copper Corporation 8315 W. 3595 S. PO Box 6001 Magna, UT 84044-6001 Power Plt/ Lab/ Tailings Impoundment 9600 West 2100 South Magna, UT 84044

UTM coordinates: 4,506,000 meters Northing, 405,000 meters Easting

SIC code: 1021

#### **ABSTRACT**

Kennecott Utah Copper Corp. operates Power Plant and Tailings Impoundment. The Power Plant is a four-unit, 175-megawatt capacity steam turbine generator facility. The initial plant was constructed in 1943, with the current output capacity and configuration since 1959. The plant operates on both coal and natural gas. The Tailings Impoundment stores tailings generated from the concentrating process. The South Impoundment covers approximately 5,700 acres, storing 1.7 billion tons of material. The North Impoundment covers approximately 3,300 acres, with capacity to hold an additional 1.6 billion tons of material. The Power Plant and Tailings Impoundment constitute a major source of PM<sub>10</sub>, NOX, SO<sub>2</sub> and CO.

UTAH AIR QUALITY BOARD

Richard W. Sprott, Executive Secretary Svetlana Kopytkovskiy



# **Operating Permit History**

2/25/2000 - Permit issued	Action initiated by an initial operating permit application	Enter project description here.
1/8/2002 -Permit modified	Action initiated by an administrative amendment (initiated by DAQ)	Issuance of DAQE-816-01 to relocate lime handling system from Copperton Concentrator to Bonneville Crusher
2/19/2002 -Permit modified	Action initiated by an administrative amendment (initiated by DAQ)	This modification is to remove an opacity limit that was inadvertently included for the South and North Tailings Impoundment Group (TAL206)
5/14/2003 -Permit modified	Action initiated by an administrative amendment (initiated by DAQ)	due to issuance of AO DAQE-AN0572014-03, for closing the North Concentrator (Bonneville Concentrator).
7/22/2004 -Permit modified	Action initiated by an administrative amendment (initiated by DAQ)	due to issuance of AO DAQE-AN0572013-04, for adding the diesel engine at the ash loading.

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# Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

## **Section I: General Provisions**

#### I.A. Federal Enforcement.

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

## I.B. Permitted Activity(ies).

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

## I.C. **Duty to Comply.**

- I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))
- I.C.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (R307-415-6a(6)(b))
- I.C.3 The permittee shall furnish to the Executive Secretary, within a reasonable time, any information that the Executive Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Executive Secretary copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))
- I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

## I.D. Permit Expiration and Renewal.

- I.D.1 This permit is issued for a fixed term of five years and expires on February 25, 2005. (R307-415-6a(2))
- I.D.2 Application for renewal of this permit is due by August 25, 2004. An application may be submitted early for any reason. (R307-415-5a(1)(c))
- I.D.3 An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))
- I.D.4 Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

#### I.E. Application Shield.

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Executive Secretary takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Executive Secretary any additional information identified as being needed to process the application. (R307-415-7b(2))

### I.F. Severability.

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

## I.G. Permit Fee.

- I.G.1 The permittee shall pay an annual emission fee to the Executive Secretary consistent with R307-415-9. (R307-415-6a(7))
- I.G.2 The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

## I.H. No Property Rights.

This permit does not convey any property rights of any sort, or any exclusive privilege. (R307-415-6a(6)(d))

## I.I. Revision Exception.

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

### I.J. Inspection and Entry.

- I.J.1 Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Executive Secretary or an authorized representative to perform any of the following:
- I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit. (R307-415-6c(2)(a))
- I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))
- I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. (R307-415-6c(2)(c))
- I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))
- I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))

#### I.K. Certification.

Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)

## I.L. Compliance Certification.

- I.L.1 Permittee shall submit to the Executive Secretary an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than **February 24**, **2001** and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))
- I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;
- I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;

- I.L.1.c The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and
- I.L.1.d Such other facts as the Executive Secretary may require to determine the compliance status.
- I.L.2 The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Executive Secretary: (R307-415-6c(5)(d))

Office of Enforcement, Compliance and Environmental Justice (mail code 8ENF)
EPA, Region VIII
999 18th Street, Suite 300
Denver, CO 80202-2466

#### I.M. Permit Shield.

- I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:
- I.M.1.a Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))
- I.M.1.b Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))
- I.M.2 Nothing in this permit shall alter or affect any of the following:
- I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))
- I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(g) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b)
- I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))
- I.M.2.d The ability of the Executive Secretary to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))

#### I.N. Emergency Provision.

- I.N.1 An "emergency" is any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))
- I.N.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- I.N.2.a An emergency occurred and the permittee can identify the causes of the emergency. (R307-415-6g(3)(a))
- I.N.2.b The permitted facility was at the time being properly operated. (R307-415-6g(3)(b))
- I.N.2.c During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit. (R307-415-6g(3)(c))
- I.N.2.d The permittee submitted notice of the emergency to the Executive Secretary within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))
- I.N.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (R307-415-6g(4))
- I.N.4 This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. (R307-415-6g(5))
- I.O. Operational Flexibility.

Operational flexibility is governed by R307-415-7d(1).

I.P. Off-permit Changes.

Off-permit changes are governed by R307-415-7d(2).

I.Q. Administrative Permit Amendments.

Administrative permit amendments are governed by R307-415-7e.

I.R. **Permit Modifications.** 

Permit modifications are governed by R307-415-7f.

- I.S. Records and Reporting.
- I.S.1 Records.

1.5.1.a	the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii)
I.S.1.b	For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-6a(3)(b)(i))
I.S.1.b.1	The date, place as defined in this permit, and time of sampling or measurement.
I.S.1.b.2	The date analyses were performed.
I.S.1.b.3	The company or entity that performed the analyses.
I.S.1.b.4	The analytical techniques or methods used.
I.S.1.b.5	The results of such analyses.
I.S.1.b.6	The operating conditions as existing at the time of sampling or measurement.
I.S.1.c	Additional record keeping requirements, if any, are described in Section II, Special Provisions.
I.S.2	Reports.
I.S.2.a	Monitoring reports shall be submitted to the Executive Secretary every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))
I.S.2.b	All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i)
I.S.2.c	The Executive Secretary shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. <b>Prompt, as used in this condition, shall be defined as written notification within 14 days</b> . Deviations from permit requirements due to unavoidable breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))
I.S.3 N	Notification Addresses.
I.S.3.a	All reports, notifications, or other submissions required by this permit to be submitted to

The records of all required monitoring data and support information shall be retained by

Utah Division of Air Quality P.O. Box 144820 Salt Lake City, UT 84114-4820

may be required by the Executive Secretary:

Phone: 801-536-4000

I.S.1.a

the Executive Secretary are to be sent to the following address or to such other address as

I.S.3.b All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Executive Secretary:

## For annual compliance certifications

Environmental Protection Agency, Region VIII Office of Enforcement, Compliance and Environmental Justice (mail code 8ENF) 999 18th Street, Suite 300 Denver, CO 80202-2466

For reports, notifications, or other correspondence related to permit modifications, applications, etc. Environmental Protection Agency, Region VIII Office of Partnerships & Regulatory Assistance Air & Radiation Program (mail code 8P-AR) 999 18th Street, Suite 300 Denver, CO 80202-2466

Phone: 303-312-6440

## I.T. Reopening for Cause.

- I.T.1 A permit shall be reopened and revised under any of the following circumstances:
- I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))
- I.T.1.b The Executive Secretary or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))
- I.T.1.c EPA or the Executive Secretary determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))
- I.T.1.d Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))
- I.T.2 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))

#### I.U. Inventory Requirements.

Emission inventories shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)

## **Section II: SPECIAL PROVISIONS**

II.A.	Emission Unit(s) Permitted to Discharge Air Contaminants.
	(R307-415-4(3)(a) and R307-415-4(4))
II.A.1	Hot Water Boiler (designated as Emission unit #NOC022)
	Unit Description: 7.133 MMBTU/hr natural gas fired boiler, located in the laboratory. No
	unit-specific applicable requirements.
II.A.2	Natural Gas Heaters (designated as Emission unit #SMALLHEATERS)
	Unit Description: space heaters, air conditioners, and water heaters, each rated at less
	than 5 MMBTU/hr, at various locations throughout the source. No unit-specific applicable requirements.
II.A.3	Cold Solvent Parts Washers (designated as Emission unit #DEGREASERS)
	Unit Description: 25 gal. per washer and approximately 200 gal. or less of solvent used
	every year for maintenance cleaners at various locations throughout the source.
II.A.4	Gasoline Tanks (designated as Emission unit #GASTANKS)
	Unit Description: Includes three above ground gasoline tanks, Tanks# MC-36 (10,000
	gal), TK-102 (6,000 gal), and MC-1 (1,000 gal).
II.A.5	Petroleum Storage Tanks (designated as Emission unit #TANKS)
	Unit Description: Includes four diesel tanks (Tanks# RR-1, TK-101, TWS-4, and PP-44).
	No unit-specific applicable requirements.
II.A.6	Power Plant Boiler #1 (designated as Emission unit #UPP001)
	Unit Description: Wet bottom wall-fired boiler capable of burning both coal and natural
	gas, rated at 431.4 MMBTU/hr (coal), or 453 MMBTU/hr (natural gas), equipped with
	low NOX burners and an electrostatic precipitator.
II.A.7	Power Plant Boiler #2 (designated as Emission unit #UPP002)
	Unit Description: Wet bottom wall-fired boiler capable of burning both coal and natural
	gas, rated at 431.4 MMBTU/hr (coal), or 453 MMBTU/hr (natural gas), equipped with
	low NOX burners and an electrostatic precipitator.
II.A.8	Power Plant Boiler #3 (designated as Emission unit #UPP003)
	Unit Description: Wet bottom wall-fired boiler capable of burning both coal and natural
	gas, rated at 431.4 MMBTU/hr (coal), or 453 MMBTU/hr (natural gas), equipped with
	low NOX burners and an electrostatic precipitator.
II.A.9	Power Plant Boiler #4 (designated as Emission unit #UPP004)
	Unit Description: Tangentially fired boiler capable of burning both coal and natural gas,
	rated at 838 MMBTU/hr (coal), or 872 MMBTU/hr (natural gas), equipped with an
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electrostatic precipitator.

II.A.10 **Boiler Group 1** (designated as Emission unit #UPPG1)

Unit Description: Includes three boilers, Units# UPP001, 002 and 003.

II.A.11 **Boiler Group 2** (designated as Emission unit #UPPG2)

Unit Description: Includes four boilers, Units # UPP001, 002, 003 and 004.

II.A.12 **Power Plant Coal Storage Drop and Pile** (designated as Emission unit #PPCSDP)

Unit Description: Fugitive emission source from the coal handling process, including coal pile (Unit #UPP105), drop (Unit# UPP106), and coal transfer (Unit# UPP106). No unit-specific applicable requirements.

II.A.13 **Ash Handling System** (designated as Emission unit #UPP110)

Unit Description: Wet and closed fly ash capture system, handles ash from the electrostatic precipitators. No unit-specific applicable requirements.

II.A.14 **Power Plant Roads** (designated as Emission unit #UPP111)

Unit Description: Paved roads servicing the Power Plant. No unit-specific applicable requirements.

II.A.15 **Diesel Engine** (designated as Emission unit #UPPi202)

Unit Description: 136 Hp Diesel Engine located in the Power Plant, to operate a fire water pump. No unit-specific applicable requirements.

II.A.16 **Diesel Engine** (designated as Emission unit #UPPi206)

Unit Description: 170 hp Diesel Engine located at the ash loading. No unit-specific applicable requirements.

II.A.17 **Natural Gas Generator** (designated as Emission unit #UPPi203)

Unit Description: 1.2 MMBTU/hr natural gas fired generator, located in the Power Plant. No unit-specific applicable requirements.

II.A.18 **Wet Cooling Towers (5)** (designated as Emission unit #UPPiWCT)

Unit Description: Non-contact water-cooling towers, includes Units# UPPi206 through UPPi210. No unit-specific applicable requirements.

II.A.19 **Natural Gas Purge Exhaust** (designated as Emission unit #UPPi205)

Unit Description: Natural Gas Vent. No unit-specific applicable requirements.

II.A.20 **South Tailings Impoundment Service Roads** (designated as Emission unit #TAL202)

Unit Description: Fugitive emissions from the service roads.

II.A.21 **South Tailings Impoundment** (designated as Emission unit #TAL203)

Unit Description: Tailings impoundment in existence prior to 1994, stores and manages tailings generated from the concentrating processes.

II.A.22 **North Tailings Impoundment Service Roads** (designated as Emission unit #TAL204)

Unit Description: Fugitive emissions from the service roads.

II.A.23 **North Tailings Impoundment** (designated as Emission unit #TAL205)

Unit Description: New tailings impoundment construction beginning 1994, stores and manages tailings generated from the concentrating processes.

II.A.24 **South and North Tailings Impoundment Group** (designated as Emission unit #TAL206)

Unit Description: Includes both the South and North Tailings Impoundment Group.

II.A.25 **Phosphogypsum Stack** (designated as Emission unit #TAL-PS)

Unit Description: Inactive phosphogypsum stack located within the North Tailings Impoundment.

II.A.26 Combined Analytical Laboratory (designated as Emission unit #CAL)

Unit Description: Provides laboratory support, equipped with a horizontal flume scrubber, two dust collectors, and three filters.

#### II.B. Requirements and limitations.

The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated: (R307-415-6a(1))

## II.B.1 <u>Conditions on permitted source (Source-wide)</u>

#### II.B.1.a Condition:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and

inspection of the source. [Authority granted under R307-401-5 and 40 CFR 60.11(d); condition originated in AN0572013-04, 261-95, 664-99, AN0572014-03]

## II.B.1.a.1 Monitoring:

Records required for this permit condition will serve as monitoring.

### II.B.1.a.2 **Recordkeeping:**

Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.

### II.B.1.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.1.b **Condition:**

Records shall be maintained of the material (salt, crushed slag, or sand) applied to the roads. [Authority granted under R307-307; condition originated in R307-307]

## II.B.1.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

### II.B.1.b.2 **Recordkeeping:**

The following records shall be maintained as outlined in Provision I.S.1 of this permit:

For Salt - the quantity applied, the percent by weight of insoluble solids in the salt, and the percentage of the material that is sodium chloride (NaCl).

For Sand or Crushed Slag - the quantity applied and the percent by weight of fine material, which passes the number 200 sieve in a standard gradation analysis. (origin: R307-307)

#### II.B.1.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.1.c Condition:

The permittee shall comply with the applicable requirements for servicing of motor vehicle air conditioners pursuant to 40 CFR 82, Subpart B - Servicing of Motor Vehicle Air Conditioners. [Authority granted under 40 CFR 82.30(b); condition originated in 40 CFR 82]

## II.B.1.c.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart B.

### II.B.1.c.2 Recordkeeping:

All records required in 40 CFR 82, Subpart B shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

## II.B.1.c.3 **Reporting:**

All reports required in 40 CFR 82, Subpart B shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

#### II.B.1.d Condition:

The permittee shall comply with the applicable requirements for recycling and emission reduction for class I and class II refrigerants pursuant to 40 CFR 82, Subpart F - Recycling and Emissions Reduction. [Authority granted under 40 CFR 82.150(b); condition originated in 40 CFR 82]

## II.B.1.d.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart F.

## II.B.1.d.2 **Recordkeeping:**

All records required in 40 CFR 82, Subpart F shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

## II.B.1.d.3 **Reporting:**

All reports required in 40 CFR 82, Subpart F shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

#### II.B.1.e Condition:

Visible emissions shall be no greater than 20 percent opacity except as specified elsewhere in this permit. [Authority granted under R307-201-1(2) & Utah SIP Section IX.H.2.a.B; condition originated in DAQE-AN0572013-04 and DAQE-AN0572014-03]

#### II.B.1.e.1 **Monitoring:**

A visual opacity survey of each affected emission unit shall be performed on a weekly basis by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than steam are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

#### II.B.1.e.2 **Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is indicated, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9 shall also be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.1.e.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.1.f **Condition:**

Visible emissions caused by fugitive dust shall not exceed 10% at the property boundary, and 20% onsite except during periods when wind speeds exceed 25 miles per hour and control measures in the most recently approved fugitive dust control plan are being taken. The fugitive dust control plan shall consider fugitive dust control strategies listed in R307-309-4, including but not limited to: wetting or watering; chemical stabilization; enclosing or covering operation; reducing vehicular speed; etc. [Authority granted under R307-309-3(1) & R307-309-4(3); condition originated in R307-309-3(1) & R307-309-4(3)]

## II.B.1.f.1 **Monitoring:**

In lieu of monitoring via visible emissions observations, adherence to the most recently approved fugitive dust control plan shall be monitored to demonstrate that appropriate measures are being implemented to control fugitive dust.

## II.B.1.f.2 **Recordkeeping:**

Records of measures taken to control fugitive dust shall be maintained to demonstrate adherence to the most recently approved fugitive dust control plan. If wind speeds are measured to establish an exception from the above visible emissions limits, records of those measurements shall be maintained. Records shall be maintained as described in Provision I.S.1 of this permit.

### II.B.1.f.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.1.g Condition:

Fugitive emission shall be not greater than 15 percent opacity. [Authority granted under R307-309-2 & Utah SIP Section IX.H.2.a.B; condition originated in DAQE-AN0572013-04 and DAQE-AN0572014-03]

#### II.B.1.g.1 **Monitoring:**

A visual observation of each affected emission unit shall be performed on a monthly basis by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. The individual is not required to be a certified visible emissions observer (VEO). If any visible emissions are observed, an opacity determination of that emission unit shall be performed by a certified VEO in accordance with 40 CFR 60, Appendix A, Method 9 within 24 hours of the initial observation.

#### II.B.1.g.2 **Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is indicated, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9 shall also be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.1.g.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

## II.B.2 Conditions on Cold Solvent Parts Washers (Emission unit #DEGREASERS)

#### II.B.2.a Condition:

The permittee shall ensure that the following conditions are met:

- (1) Each solvent or degreaser cleaning operation is equipped with a cover which shall remain closed except during actual loading, unloading or handling of parts in cleaner. The cover shall be designed so that it can be easily operated with one hand if
- (a) the volatility of the solvent is greater than 2 kPa (15 mm Hg or 0.3 psi) measured at 38 degrees C (100 degrees F),
  - (b) the solvent is agitated, or
  - (c) the solvent is heated.
- (2) An internal draining rack for cleaned parts shall be installed on which parts shall be drained until all dripping ceases. If the volatility of the solvent is greater than 4.3 kPa (32 mm Hg at 38 degrees C (100 degrees F)), the drainage facility must be internal, so that parts are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Waste or used solvent shall be stored in covered containers. Waste solvents or waste materials, which contain solvents shall be disposed of by recycling, reclaiming, by incineration in an incinerator approved to process hazardous materials, or by an alternate means approved by the executive secretary.
- (4) Tanks, containers and all associated equipment shall be maintained in good operating condition and leaks shall be repaired immediately or the degreaser shall be shutdown.
- (5) Written procedures for the operation and maintenance of the degreasing or solvent cleaning equipment shall be permanently posted in an accessible and conspicuous location near the equipment.
- (6) If the solvent volatility is greater than 4.3 kPa (33 mm Hg or 0.6 psi) measured at 38 degrees C (100 degrees F), or if solvent is heated above 50 degrees C (120 degrees F), then one of the following control devices shall be used:
  - (a) freeboard that gives a freeboard ratio greater than 0.7;
  - (b) water cover if the solvent is insoluble in and heavier than water;
- (c) other systems of equivalent control, such as a refrigerated chiller or carbon absorption.
- (7) If used, the solvent spray shall be a solid fluid stream at a pressure which does not cause excessive splashing and may not be a fine, atomized or shower type spray. [Authority granted under R307-335-2; condition originated in R307-335-2]

#### II.B.2.a.1 **Monitoring:**

A visual observation shall be conducted monthly for all equipment and applicable work practices.

#### II.B.2.a.2 **Recordkeeping:**

Results of monthly inspections and the volatility of the solvent(s) being used shall be recorded and maintained as described in Provision I.S.1 of this permit.

#### II.B.2.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

## II.B.3 Conditions on Gasoline Tanks (Emission unit #GASTANKS)

#### II.B.3.a **Condition:**

At least 90 percent of the gasoline vapor, by weight, displaced during the filling of the stationary storage container shall be prevented from being released to the atmosphere. [Authority granted under R307-328-4; condition originated in R307-328-4]

#### II.B.3.a.1 **Monitoring:**

The 90 percent performance standard of the vapor control system shall be based on approved operating procedures and equipment specifications. (origin: R307-328-3)

## II.B.3.a.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

## II.B.3.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.3.b **Condition:**

The permittee shall maintain records of the average monthly storage temperature, the type of liquid, throughput quantities, and the maximum true vapor pressure. [Authority granted under R307-327-1(4); condition originated in R307-327-1(4)]

### II.B.3.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

## II.B.3.b.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.3.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

## II.B.4 Conditions on Power Plant Boiler #4 (Emission unit #UPP004)

#### II.B.4.a **Condition:**

Emissions of NO<sub>x</sub> shall be no greater than 306 lbs/hr and 336 ppmdv (measured at 3% oxygen) during natural gas fired conditions during the period from November 1 to the last day in February, inclusive. [Authority granted under Utah SIP Section IX.H.2.b.Z; condition originated in DAQE-AN0572013-04]

#### II.B.4.a.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested annually when the boiler is to be used between November 1 and the last day in February. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of

the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

#### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E shall be used to determine the pollutant emission rate.
- (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Conditions During Testing. The heat input during all compliance testing shall be no less than 90% of the design rate for each boiler.

#### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

#### Reporting:

The stack results shall be submitted to the Executive Secretary within 60 days of completion of the testing. Results shall clearly identify results as compared to permit limits and indicate compliance status.

For the months of November, December, January, and February, permittee shall provide monthly reports to the Executive Secretary showing daily total emission estimates of NO<sub>x</sub> based upon boiler usage, fuel consumption and previously available results of stack tests.

#### II.B.4.b Condition:

Emissions of NO<sub>x</sub> shall be no greater than 377 lbs/hr and 384 ppmdv (measured at 3% oxygen) during coal fired condition and during the period from March 1 to October 31, inclusive, for any fuel. [Authority granted under Utah SIP Section IX.H.2.b.Z; condition originated in DAQE-AN0572013-04]

## II.B.4.b.1 **Monitoring:**

Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested annually when (i) a fuel other than natural gas is used during the period from March 1 to October 31, inclusive (emission testing shall be performed for each fuel used other than natural gas) or

II.B.4.a.2

II.B.4.a.3

- (ii) natural gas is used from March 1 to October 31 but no testing was done between November 1 and the last day in February. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

#### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E shall be used to determine the pollutant emission rate.
- (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Conditions During Testing. The heat input during all compliance testing shall be no less than 90% of the design rate for each boiler.

#### II.B.4.b.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

#### II.B.4.b.3 **Reporting:**

In addition to the reporting requirements of Section I of this permit, the permittee shall submit the results of the stack tests to the Executive Secretary within 60 days of completion of the testing. Results shall clearly identify test results as compared to permit limits and indicate compliance status.

## II.B.4.c Condition:

Emissions of  $PM_{10}$  shall be no greater than 0.004 grain/dscf (68 deg F, 29.92 in Hg) during natural gas fired conditions during the period from November to the last day in February, inclusive. [Authority granted under Utah SIP Section IX.H.2.b.Z; condition originated in DAQE-AN0572013-04]

#### II.B.4.c.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested annually when the boiler is to be used between November 1 and the last day in February. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

#### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.
- (3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered  $PM_{10}$ .
- (4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. The heat input during all compliance testing shall be no less than 90% of the design rate for each boiler.

#### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

#### **Reporting:**

The stack results shall be submitted to the Executive Secretary within 60 days of completion of the testing. Results shall clearly identify results as compared to permit limits and indicate compliance status.

For the months of November, December, January, and February, permittee shall provide monthly reports to the Executive Secretary showing daily total emission

II.B.4.c.2

II.B.4.c.3

estimates of  $PM_{10}$  based upon boiler usage, fuel consumption and previously available results of stack tests.

#### II.B.4.d **Condition:**

Emissions of PM<sub>10</sub> shall be no greater than 33.5 lbs/hr and 0.029 grains/dscf (68 degrees F, 29.92 in. Hg) during coal fired condition and during the period from March 1 to October 31, inclusive, for any fuel. [Authority granted under Utah SIP Section IX.H.2.b.Z; condition originated in DAOE-AN0572013-04]

#### II.B.4.d.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested annually when (i) a fuel other than natural gas is used during the period from March 1 to October 31, inclusive (emission testing shall be performed for each fuel used other than natural gas) or (ii) natural gas is used from March 1 to October 31 but no testing was done between November 1 and the last day in February. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

#### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.
- (3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered  $PM_{10}$ .
- (4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The heat input during all compliance testing shall be no less than 90% of the design rate for each boiler.

## II.B.4.d.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

## II.B.4.d.3 **Reporting:**

In addition to the reporting requirements of Section I of this permit, the permittee shall submit the results of the stack tests to the Executive Secretary within 60 days of completion of the testing. Results shall clearly identify test results as compared to permit limits and indicate compliance status.

#### II.B.4.e Condition:

Visible emissions shall be no greater than 10 percent opacity during natural gas fired conditions except as provided in R307-201-1(7) (startup and shutdown etc.). [Authority granted under Utah SIP Section IX.H.2.b.Z; condition originated in DAQE-AN0572013-04]

### II.B.4.e.1 **Monitoring:**

The permittee shall calibrate, maintain and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere in accordance with R307-170 and shall record the output of the system. The opacity shall be averaged over six-minute periods.

## II.B.4.e.2 **Recordkeeping:**

Results of opacity observations shall be recorded and maintained as required in R307-170 and as described in Provision I.S.1 of this permit.

#### II.B.4.e.3 **Reporting:**

Reports shall be submitted as required by R307-170, Continuous Emission Monitoring Program. The reports are considered prompt notification of permit deviation required in Provision I.S.2.c of this permit, if all information required by Provision I.S.2.c is included in the report.

#### II.B.4.f Condition:

Visible emissions shall be no greater than 20 percent opacity during coal fired conditions except as provided in R307-201-1(7) (startup and shutdown etc.). [Authority granted under Utah SIP Section IX.H.2.b.Z; condition originated in DAQE-AN0572013-04]

#### II.B.4.f.1 **Monitoring:**

The permittee shall calibrate, maintain and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere in accordance with R307-170 and shall record the output of the system. The opacity shall be averaged over six-minute periods.

## II.B.4.f.2 **Recordkeeping:**

Results of opacity observations shall be recorded and maintained as required in R307-170 and as described in Provision I.S.1 of this permit.

## II.B.4.f.3 **Reporting:**

Reports shall be submitted as required by R307-170, Continuous Emission Monitoring Program. The reports are considered prompt notification of permit deviation required in Provision I.S.2.c of this permit, if all information required by Provision I.S.2.c is included in the report.

## II.B.5 Conditions on Boiler Group 1 (Emission unit #UPPG1)

#### II.B.5.a **Condition:**

Emissions of NO<sub>x</sub> shall be no greater than 159 lbs/hr and 336 ppmdv (measured at 3% oxygen) for each boiler during natural gas fired conditions during the period from November 1 to the last day in February, inclusive. [Authority granted under Utah SIP Section IX.H.2.b.Z; condition originated in DAQE-AN0572013-04]

## II.B.5.a.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested annually when the boiler is to be used between November 1 and the last day in February. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E shall be used to determine the pollutant emission rate.
- (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Conditions During Testing. The heat input during all compliance testing shall be no less than 90% of the design rate for each boiler.

## II.B.5.a.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

## II.B.5.a.3 **Reporting:**

The stack results shall be submitted to the Executive Secretary within 60 days of completion of the testing. Results shall clearly identify results as compared to permit limits and indicate compliance status.

For the months of November, December, January, and February, permittee shall provide monthly reports to the Executive Secretary showing daily total emission estimates of NO<sub>x</sub> based upon boiler usage, fuel consumption and previously available results of stack tests.

#### II.B.5.b Condition:

Emissions of NO<sub>x</sub> shall be no greater than 216 lbs/hr and 426.5 ppmdv (measured at 3% oxygen) for each boiler during coal fired condition and during the period from March 1 to October 31, inclusive, for any fuel. [Authority granted under Utah SIP Section IX.H.2.b.Z; condition originated in DAQE-AN0572013-04]

### II.B.5.b.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested annually when (i) a fuel other than natural gas is used during the period from March 1 to October 31, inclusive (emission testing shall be performed for each fuel used other than natural gas) or (ii) natural gas is used from March 1 to October 31 but no testing was done between November 1 and the last day in February. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E shall be used to determine the pollutant emission rate.
- (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be

multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Conditions During Testing. The heat input during all compliance testing shall be no less than 90% of the design rate for each boiler.

## II.B.5.b.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

## II.B.5.b.3 **Reporting:**

In addition to the reporting requirements of Section I of this permit, the permittee shall submit the results of the stack tests to the Executive Secretary within 60 days of completion of the testing. Results shall clearly identify test results as compared to permit limits and indicate compliance status.

#### II.B.5.c Condition:

Emissions of PM<sub>10</sub> shall be no greater than 0.004 grain/dscf (68 deg F, 29.92 in Hg) for each boiler during natural gas fired conditions during the period from November 1 to the last day in February, inclusive. [Authority granted under Utah SIP Section IX.H.2.b.Z; condition originated in DAQE-AN0572013-04]

### II.B.5.c.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested annually when the boiler is to be used between November 1 and the last day in February. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

## (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.
- (3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be

tested using a method specified by the Executive Secretary. All particulate captured shall be considered  $PM_{10}$ .

- (4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. The heat input during all compliance testing shall be no less than 90% of the design rate for each boiler.

## II.B.5.c.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

#### Reporting:

The stack results shall be submitted to the Executive Secretary within 60 days of completion of the testing. Results shall clearly identify results as compared to permit limits and indicate compliance status.

For the months of November, December, January, and February, permittee shall provide monthly reports to the Executive Secretary showing daily total emission estimates of PM<sub>10</sub> based upon boiler usage, fuel consumption and previously available results of stack tests.

#### II.B.5.d Condition:

II.B.5.c.3

Emissions of  $PM_{10}$  shall be no greater than 17.3 lbs/hr and 0.029 grains/dscf (68 degrees F, 29.92 in. Hg) for each boiler during coal fired condition and during the period from March 1 to October 31, inclusive, for any fuel. [Authority granted under Utah SIP Section IX.H.2.b.Z; condition originated in DAQE-AN0572013-04]

### II.B.5.d.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested annually when (i) a fuel other than natural gas is used during the period from March 1 to October 31, inclusive (emission testing shall be performed for each fuel used other than natural gas) or (ii) natural gas is used from March 1 to October 31 but no testing was done between November 1 and the last day in February. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.
- (3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered  $PM_{10}$ .
- (4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. The heat input during all compliance testing shall be no less than 90% of the design rate for each boiler.

### II.B.5.d.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

#### II.B.5.d.3 Reporting:

In addition to the reporting requirements of Section I of this permit, the permittee shall submit the results of the stack tests to the Executive Secretary within 60 days of completion of the testing. Results shall clearly identify test results as compared to permit limits and indicate compliance status.

#### II.B.5.e Condition:

Visible emissions shall be no greater than 10 percent opacity during natural gas fired conditions except as provided in R307-201-1(7) (startup and shutdown etc.). [Authority granted under Utah SIP Section IX.H.2.b.Z; condition originated in DAQE-AN572013-04]

#### II.B.5.e.1 **Monitoring:**

The permittee shall calibrate, maintain and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere in accordance with R307-170 and shall record the output of the system. The opacity shall be averaged over six-minute periods.

## II.B.5.e.2 **Recordkeeping:**

Results of opacity observations shall be recorded and maintained as required in R307-170 and as described in Provision I.S.1 of this permit.

## II.B.5.e.3 **Reporting:**

Reports shall be submitted as required by R307-170, Continuous Emission Monitoring Program. The reports are considered prompt notification of permit deviation required in Provision I.S.2.c of this permit, if all information required by Provision I.S.2.c is included in the report.

#### II.B.5.f Condition:

Visible emissions shall be no greater than 20 percent opacity during coal fired conditions except as provided in R307-201-1(7) (startup and shutdown etc.). [Authority granted under Utah SIP Section IX.H.2.b.Z; condition originated in DAQE-AN0572013-04]

### II.B.5.f.1 **Monitoring:**

The permittee shall calibrate, maintain and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere in accordance with R307-170 and shall record the output of the system. The opacity shall be averaged over six-minute periods.

### II.B.5.f.2 **Recordkeeping:**

Results of opacity observations shall be recorded and maintained as required in R307-170 and as described in Provision I.S.1 of this permit.

## II.B.5.f.3 **Reporting:**

Reports shall be submitted as required by R307-170, Continuous Emission Monitoring Program. The reports are considered prompt notification of permit deviation required in Provision I.S.2.c of this permit, if all information required by Provision I.S.2.c is included in the report.

#### II.B.6 Conditions on Boiler Group 2 (Emission unit #UPPG2)

### II.B.6.a **Condition:**

Natural gas consumption shall be no greater than 40 MM cubic ft/day during the period from November 1 to the last day of February, inclusive. [Authority granted under Utah SIP Section IX.H.2.b.Z; condition originated in DAQE-AN0572013-04]

#### II.B.6.a.1 **Monitoring:**

The record serves as monitoring.

#### II.B.6.a.2 **Recordkeeping:**

Records of gas meter readings shall be kept on a daily basis and shall be maintained as described in Provision I.S of this permit.

#### II.B.6.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.6.b **Condition:**

Heat input shall be no greater than 50,400 MMBtu/day (monthly average), during the period from March 1 to October 31, inclusive. [Authority granted under Utah SIP Section IX.H.2.b.Z; condition originated in DAQE-AN0572013-04]

#### II.B.6.b.1 **Monitoring:**

The permittee shall determine the monthly average heat input by the following equation:

Heat input (MMBtu/day) = (fuel consumed in a calendar month x heat value of fuel)/number of the days of fuel used in a month

Coal consumption shall be determined by examination of purchase records and electricity production records. Natural gas consumption shall be determined by metering the gas as it is fed into the boiler with gauges.

## II.B.6.b.2 **Recordkeeping:**

The records required for monitoring shall be maintained as described by Provision S.1 in Section I of this permit.

### II.B.6.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.6.c Condition:

The permittee shall use only natural gas as a fuel, during the period of November 1 to the last day in February, inclusive, unless the supplier or transporter of the natural gas imposes a curtailment. The permittee may then burn coal only for the duration of the curtailment plus sufficient time to empty the coal bins following the curtailment. Natural gas curtailment is defined as any period when the natural gas provider/supplier imposes an interruption of service, and the curtailment is involuntary and beyond the control of the permittee. [Authority granted under Utah SIP Section IX.H.2.b.Z; condition originated in DAQE-AN0572013-04]

#### II.B.6.c.1 **Monitoring:**

A log shall be maintained which identifies, the day a curtailment was imposed, the duration of curtailment, and the coal usage.

#### II.B.6.c.2 **Recordkeeping:**

The records required for monitoring shall be maintained as described by Provision S.1 in Section I of this permit.

## II.B.6.c.3 **Reporting:**

In addition to the reporting requirements in Section I, the permittee shall notify the Executive Secretary of the curtailment within 48 hours of when it begins and within 48 hours of when it ends.

#### II.B.6.d **Condition:**

Sulfur content of any fuel burned shall be no greater than 0.52 lbs sulfur/MM Btu (12-month running average), nor shall any one test exceed 0.66 lbs of sulfur/MMBtu.

[Authority granted under Utah SIP Section IX.H.2.b.Z; condition originated in DAQE-AN0572013-04]

## II.B.6.d.1 **Monitoring:**

Coal samples shall be collected using ASTM method D2234, Type I conditions A, B, or C and systematic spacing (2 samples per day). Fuel lot size is defined as the weight of fuel consumed during three operational hours. Percent sulfur content and gross calorific value of the coal on a dry basis shall be determined for each gross sample using ASTM methods D2013, D3177, D3173, and D2015. Failure to measure at least 95% of the required increments in any month shall constitute a violation of this condition. As an alternative, verification of the sulfur content may be shown by providing copies of vendor test results for each delivery of coal to the permittee.

Sulfur content of natural gas can be verified by the analysis provided by the vendor.

Within 10 days of the end of each month, 12-month running average sulfur content shall be calculated using previous 12 months of record.

## II.B.6.d.2 **Recordkeeping:**

The following records shall be maintained as described by Provision S.1 in Section I of this permit: sulfur content, gross calorific value and moisture content for each gross coal sample; the gross calorific value of all coal and gas; the total amount of coal and gas burned per day; and the 12-month running average sulfur content; and the copies of vendor test results.

#### II.B.6.d.3 **Reporting:**

In addition to the reporting requirements in Section I of this permit, the permittee shall submit monthly reports of sulfur input to the boilers. The report shall include sulfur content, gross calorific value and moisture content for each gross coal sample; the gross calorific value of all coal and gas; the total amount of coal and gas burned; and the annual running average sulfur content.

#### II.B.6.e **Condition:**

The permittee may combust coal, natural gas, used oil and/or number 2 fuel oil or any other fuel oil with less sulfur content in the boilers during the period from March 1 to October 31, inclusive. The used oil shall meet all the specifications of 40 CFR 279.11 and contain less than 1000 ppm total halogens. [Authority granted under Utah SIP IX.H.2.b.Z; condition originated in DAQE-AN0572013-04]

#### II.B.6.e.1 **Monitoring:**

Each batch of used oil shall be analyzed for the constituents identified in 40 CFR 279.11 using acceptable analytical methods.

#### II.B.6.e.2 **Recordkeeping:**

The record of the contaminant character of the used oil shall be maintained.

#### II.B.6.e.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.6.f Condition:

Coal consumption shall be no greater than 1370 tons per day during curtailment of natural gas supply during the period from November 1 to the last day of February, inclusive. Natural gas curtailment is defined as any period when the natural gas provider/supplier imposes an interruption of service, and the curtailment is involuntary and beyond the control of the permittee. [Authority granted under SIP condition IX.H.2.b.Z; condition originated in DAQE-AN0572013-04]

#### II.B.6.f.1 **Monitoring:**

Coal consumption shall be determined by examination of purchase records and electricity production records on a daily basis

### II.B.6.f.2 **Recordkeeping:**

The records required for monitoring shall be maintained as described by Provision S.1 in Section I of this permit.

## II.B.6.f.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

## II.B.7 Conditions on South Tailings Impoundment Service Roads (Emission unit #TAL202)

#### II.B.7.a Condition:

Magnesium Chloride or other stabilization methods approved by the Executive Secretary, shall be applied to the top, middle, and lower perimeter unpaved roadways no later than May 30 of each calendar year and reapplied, as necessary, to minimize fugitive dust, throughout the year. In addition, if the effectiveness of the magnesium chloride decreases or unpaved roads used by traffic prior to the required reapplication, fugitive dust shall be stabilized by water sprays or other methods on an as needed basis or as determined necessary. [Authority granted under Utah SIP Section IX.H.2.b.BB.B; condition originated in DAQE-664-99]

#### II.B.7.a.1 **Monitoring:**

Between February 15 and November 15 of each calendar year, permittee shall inspect the unpaved roads at least once every two weeks. The frequency shall be increased to daily at least 48 hours prior to each wind event that is forecasted. A wind event is defined as: wind gusts exceeding 25 miles per hour (mph) for more than one hour, as measured by the permittee's station on top of the tailings impoundment.

#### II.B.7.a.2 **Recordkeeping:**

Records of treatments shall be kept for all periods including the following items: date, number of treatments made, dilution rate, and quantity, and the time of day treatments were made. In addition, records of days of freezing temperature shall be kept.

#### II.B.7.a.3 **Reporting:**

In addition to the reporting requirements in Section I of the permit, the permittee shall submit, on a quarterly basis, documentation showing areas of dust suppressant application during the quarter. The quarterly reports shall be submitted within 30 days of the end of each calendar quarter.

## II.B.8 Conditions on South Tailings Impoundment (Emission unit #TAL203)

#### II.B.8.a **Condition:**

The permittee shall schedule dike raising and associated peripheral pipe deactivation in an efficient manner so as to minimize fugitive dust and peripheral discharge pipeline downtime. The dike raising schedule for the southern-half of the tailings pond between April 1 and November 15 shall be as follows:

- A. If more than 3,000 feet of contiguous peripheral discharge pipeline is deactivated for longer than seven working days, the permittee shall ensure that the 95% wetness criterion of total tailing area is met, either with natural precipitation, snow and ice cover, vegetation, or stabilization, or with temporary piping or any other method to achieve adequate wetness.
- B. If more than 2,500 feet of contiguous peripheral discharge pipeline is deactivated for longer than 12 working days, the permittee shall ensure that the 95% wetness criterion of total tailing area is met, either with natural precipitation, snow and ice cover, vegetation, or stabilization, or with temporary piping or any other method to achieve adequate wetness.

Fugitive dust generated from disturbed areas created by dike raising shall be stabilized by water sprays or other methods approved by the Executive Secretary. [Authority granted under Utah SIP Section IX.H.2.b.BB.B; condition originated in DAQE-664-99]

## II.B.8.a.1 **Monitoring:**

The permittee shall monitor the peripheral discharge pipe downtime (length of pipe, and duration) and the fugitive dust stabilization activities daily.

#### II.B.8.a.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.8.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.8.b **Condition:**

The cycle time for wetting all active interior beach areas shall be four days, except during periods of new dike construction, at which time the permittee shall ensure that the 95% wetness criterion for total tailings area is met with temporary piping or any other method to achieve adequate wetness. [Authority granted under Utah SIP Section IX.H.2.b.BB.B; condition originated in DAQE-664-99]

#### II.B.8.b.1 **Monitoring:**

Cycle time shall be verified on a quarterly basis.

#### II.B.8.b.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

## II.B.8.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.8.c Condition:

By the end of year 2004 no area on the South Tailings Impoundment shall be operational. The surface area shall be reclaimed as discussed in the June 7, 1994, Tailings Modernization Project Fugitive Dust Abatement Program, or a modified plan approved by the Executive Secretary. Should saturation and/or foundation conditions for subsequent transition step back dikes prohibit complete reclamation of the South Tailing Impoundment by the end of year 2004, permittee shall notify the Executive Secretary in writing of the revised reclamation schedule within 120 days of the revised reclamation schedule. [Authority granted under Utah SIP Section IX.H.2.b.BB.B]; condition originated in DAQE-664-99]

## II.B.8.c.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

## II.B.8.c.2 **Recordkeeping:**

All vegetation and other reclamation activities shall be documented in accordance with Provision I.S.1 of this permit.

### II.B.8.c.3 **Reporting:**

In addition to the reporting requirements in Section I of the permit, the permittee shall submit, on a quarterly basis, documentation showing areas of planting during the quarter. The quarterly reports shall be submitted within 30 days of the end of each calendar quarter.

### II.B.8.d **Condition:**

Exterior tailings impoundment areas determined to be sources of excess fugitive dust (greater than 20% opacity) shall be stabilized through vegetation cover or other approved methods. [Authority granted under Utah SIP Section IX.H.2.b.BB.B; condition originated in DAQE-664-99]

#### II.B.8.d.1 **Monitoring:**

Between February 15 and November 15 of each calendar year, permittee shall inspect the exterior dike area at least once every two weeks. The frequency shall be increased to daily at least 48 hours prior to each wind event that is forecasted. A wind event is defined as: wind gusts exceeding 25 mph for more than one hour, as measured by the permittee's station on top of the tailings impoundment.

## II.B.8.d.2 **Recordkeeping:**

All inspections, vegetation, and other stabilization activities shall be documented in accordance with Provision I.S.1 of this permit.

#### II.B.8.d.3 **Reporting:**

In addition to the reporting requirements in Section I of the permit, the permittee shall submit, on a quarterly basis, documentation showing areas of planting during the quarter. The quarterly reports shall be submitted within 30 days of the end of each calendar quarter.

## II.B.9 Conditions on North Tailings Impoundment Service Roads (Emission unit #TAL204)

#### II.B.9.a **Condition:**

To minimize fugitive dust emissions, all unpaved roads and other unpaved operational areas that are used by mobile equipment shall be water sprayed and/or chemically treated as discussed in the June 7, 1994, Tailings Modernization Project Fugitive Dust Abatement Program, or a modified plan approved by the Executive Secretary. Treatment shall be of sufficient frequency and quantity to maintain the surface material in a damp/moist condition. Supplemental stabilization to include other dust causing activities shall be by water sprays or other methods on an as-needed basis or as determined necessary and approved by the Executive Secretary. If chemical treatment other than magnesium chloride is to be used, the plan must be approved by the Executive Secretary. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-664-99]

## II.B.9.a.1 **Monitoring:**

Between February 15 and November 15 of each calendar year, permittee shall inspect the unpaved roads at least once every two weeks. The frequency shall be increased to daily at least 48 hours prior to each wind event that is forecasted. A wind event is defined as: wind gusts exceeding 25 miles per hour (mph) for more than one hour, as measured by the permittee's station on top of the tailings impoundment.

## II.B.9.a.2 **Recordkeeping:**

Records of treatments shall be kept for all periods including the following items: date, number of treatments made, dilution rate, and quantity, and the time of day treatments were made. In addition, records of days of freezing temperature shall be kept.

#### II.B.9.a.3 **Reporting:**

In addition to the reporting requirements in Section I of the permit, the permittee shall submit, on a quarterly basis, documentation showing areas of dust suppressant application during the quarter. The quarterly reports shall be submitted within 30 days of the end of each calendar quarter.

#### II.B.10 Conditions on North Tailings Impoundment (Emission unit #TAL205)

#### II.B.10.a **Condition:**

Exterior tailings impoundment areas determined to be sources of excess fugitive dust (greater than 20% opacity) shall be stabilized through vegetation cover or other approved methods. The exterior tailings surface area shall be revegetated or stabilized so that no more than 5% of the total exterior surface area shall be subject to wind erosion. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-664-99]

#### II.B.10.a.1 **Monitoring:**

Between February 15 and November 15 of each calendar year, permittee shall inspect the exterior dike area at least once every two weeks. The frequency shall be increased to daily at least 48 hours prior to each wind event that is forecasted. A wind event is defined as: wind gusts exceeding 25 mph for more than one hour, as measured by the permittee's station on top of the tailings impoundment.

## II.B.10.a.2 **Recordkeeping:**

All inspections, vegetation, and other stabilization activities shall be documented in accordance with Provision I.S.1 of this permit.

#### II.B.10.a.3 **Reporting:**

In addition to the reporting requirements in Section I of the permit, the permittee shall submit, on a quarterly basis, documentation showing areas of planting during the quarter. The quarterly reports shall be submitted within 30 days of the end of each calendar quarter.

#### II.B.10.b Condition:

The permittee shall schedule dike raising or main embankment construction and associated peripheral pipe deactivation in an efficient manner so as to minimize fugitive emissions and peripheral discharge pipeline downtime. As the embankment cells are filled during continual raising of the embankment, dust shall be controlled by the high water content of the hydraulically placed cyclone underflow. Portions of the embankment that are not under active construction shall be kept wet by applying tackifiers or pump water from the toe ditch. Newly formed exterior slopes shall be stabilized with tackifiers as needed and shall be planted during the next appropriate planting season. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-664-99]

#### II.B.10.b.1 **Monitoring:**

The permittee shall monitor the peripheral discharge pipe downtime (length of pipe, and duration) and the fugitive dust stabilization activities daily.

### II.B.10.b.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.10.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.10.c Condition:

The peripheral discharge system shall have the capacity to deliver a minimum of 30,000 gpm. The system shall consist of an eastern half and a western half, each capable of delivering 15000 gpm. The two halves of the system shall be able to operate either simultaneously or independently. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-664-99]

#### II.B.10.c.1 **Monitoring:**

A flow verification shall be performed quarterly on the peripheral discharge system.

#### II.B.10.c.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.10.c.3 **Reporting:** 

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.10.d Condition:

The cycle time required for wetting all interior beaches shall be no greater than 4 days. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-664-99]

II.B.10.d.1 **Monitoring:** 

Cycle time shall be verified on a quarterly basis.

II.B.10.d.2 **Recordkeeping:** 

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.10.d.3 **Reporting:** 

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.10.e **Condition:** 

Disturbed or stripped areas shall be kept sufficiently moist during the project to minimize fugitive dust. This control, or other equivalent control methods, shall remain operational during the project cycle and until the areas have been reclaimed. The control methods used shall be operational as needed 24 hours per day, 365 days per year or until the area has been reclaimed. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-664-99]

II.B.10.e.1 **Monitoring:** 

Records required for this permit condition will serve as monitoring.

II.B.10.e.2 **Recordkeeping:** 

The control method used and the date shall be recorded for all periods.

II.B.10.e.3 **Reporting:** 

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.11 Conditions on South and North Tailings Impoundment Group (Emission unit #TAL206)

#### II.B.11.a Condition:

In the event of a temporary or permanent shutdown that would affect the tailings impoundment the permittee shall:

A. Submit an interim dust control plan to the Executive Secretary, within 30 days of the announcement of a temporary shutdown that is expected to last longer than one week. Depending on the duration of the shutdown and the time of year in which the temporary shutdown occurs, interim dust control measures shall include flowing water through the peripheral discharge system, application of tackifiers, use of sprinklers, vegetating, or other controls as new technology becomes available.

B. Follow the dust control procedures for transition off the Existing Tailings Impoundment and reclamation of the North Impoundment as proposed in the Tailings Modernization Project Fugitive Dust Abatement Program, June 7, 1994, or a modified plan approved by the Executive Secretary. [Authority granted under Utah SIP Section IX.H.2.b.BB.B; condition originated in DAQE-664-99]

## II.B.11.a.1 **Monitoring:**

The report (dust control plan) required for this permit condition will serve as monitoring.

## II.B.11.a.2 **Recordkeeping:**

The report (dust control plan) required for this permit condition will serve as recordkeeping

## II.B.11.a.3 **Reporting:**

In addition to the reporting requirements in Section I of this permit, the permittee shall notify the Executive Secretary as soon as they become aware of the shutdown.

## II.B.11.b Condition:

The tailings distribution system shall be operated to maximize surface wetness. No more than 50 contiguous acres or more than 5% of the total tailings area shall be permitted to have potential for wind erosion, unless those areas are stabilized by vegetation, tackifier, or other methods of fugitive dust control approved by the Executive Secretary. Wind erosion potential is the area that is not wet, frozen, vegetated, crusted, or treated and has the potential for wind erosion. If the permittee or the Executive Secretary determines that the percentage of wind erosion potential is exceeded, the permittee shall meet with the Executive Secretary, or duly authorized representative, to discuss additional or modified fugitive dust control/operational practices and implementation schedule for such within five working days after verbal notification by either party. [Authority granted under Utah SIP Section IX.H.2.b.BB.B; condition originated in DAQE-664-99]

#### II.B.11.b.1 Monitoring:

Permittee shall conduct erosion potential grid inspections monthly between February 15 and November 15.

If it is determined by the permittee or the Executive Secretary that the total surface area is greater than 5 percent, or at the request of the Executive Secretary, a grid inspection schedule shall be immediately initiated by the permittee that will result in inspections being conducted once every five working days and results reported to the Executive Secretary within 24 hours of the determination, until the permittee measures a total surface with the potential for wind erosion, less than or equal to 5 percent.

Between February 15 and November 15 of each calendar year, permittee shall inspect the interior surface area at least once every two weeks. The frequency shall be increased to daily at least 48 hours prior to each wind event that is forecasted. A wind event is defined as: wind gusts exceeding 25 mph for more than one hour, as measured by the permittee's station on top of the tailings impoundment. The grid inspection shall serve as one of these inspections.

Between February 15 and November 15 of each calendar year, the permittee shall alert the DAQ promptly, and continue surveillance and coordination if a wind event is forecasted within 48 hours. A wind event is defined as: wind gusts exceeding 25 mph for more than one hour, as measured by the permittee's station on top of the tailings impoundment.

## II.B.11.b.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

## II.B.11.b.3 **Reporting:**

In addition to the reporting requirements in Section I of this permit, and in the monitoring requirement, the permittee shall submit, on a quarterly basis, documentation of the monthly grid inspection of the tailings surface area, including the wind erosion potential of the tailings surface area, and wind direction and speed data for days that winds exceed 25 mph for a period of one hour or greater during which no precipitation occurred. The quarterly reports shall be submitted within 30 days of the end of each calendar quarter.

## II.B.12 Conditions on Phosphogypsum Stack (Emission unit #TAL-PS)

## II.B.12.a **Condition:**

The phosphogypsum stack shall remain inactive. No phosphogypsum shall be added to or removed from the stack. [Authority granted under 40 CFR 61 Subpart R; condition originated in 40 CFR 61 Subpart R]

## II.B.12.a.1 **Monitoring:**

An inactive verification shall be performed annually.

#### II.B.12.a.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.12.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.13 Conditions on Combined Analytical Laboratory (Emission unit #CAL)

#### II.B.13.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-261-95]

#### II.B.13.a.1 **Monitoring:**

A visual observation of each affected emission unit shall be performed on a quarterly basis by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. The individual is not required to be a certified visible emissions observer (VEO). If any visible emissions are observed, an opacity determination of that emission unit shall be performed by a certified VEO in accordance with 40 CFR 60, Appendix A, Method 9 within 24 hours of the initial observation.

## II.B.13.a.2 **Recordkeeping:**

Records of visual observations performed and data required by 40 CFR 60, Appendix A, Method 9 for each determination shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.13.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

## II.C. Emissions Trading.

(R307-415-6a(10))

Not applicable to this source.

### II.D. Alternative Operating Scenarios.

(R307-415-6a(9))

Not applicable to this source.

## **Section III: PERMIT SHIELD**

The following requirements have been determined to be not applicable to this source in accordance with Provision I.M. Permit Shield:

#### III.A. 40 CFR, Part 60, Subpart LL (NSPS, Metallic Mineral Processing Plants)

This regulation is not applicable to the permitted source (Source-wide) because the mineral processing facilities at the North Concentrator were constructed in the 1960's, long before 1982, when Subpart LL was proposed

#### III.B. 40 CFR, Part 60, Subparts K, Ka, Kb (NSPS/ Volatile Organic Liquid Storage Vessels)

This regulation is not applicable to the permitted source (Source-wide) because none of the petroleum liquid storage tanks (except TK-101) are large enough to be subject to NSPS and TK-101 is located at a gasoline fueling station which is exempt from NSPS in accordance with 40 CFR 60.110b(d)(6).

## III.C. 40 CFR 72, 73, 75, 76, 77, 78, and R307-417-1 (Acid Rain Requirements)

This regulation is not applicable to the permitted source (Source-wide) because the power plant generates power for Kennecott's use, not for sale

#### III.D. 40 CFR Part 60, Subpart D, Da, Db, Dc (Standards of Performance for New Stationary Sources)

This regulation is not applicable to the Boiler Group 2 (Emission unit # UPPG2) because the boilers were constructed in the 1940's and 1959-1960, long before 1971, 1978, 1984, and 1989 when Subparts D, Da, Db and Dc were proposed

## III.E. 40 CFR Part 60, Subpart D, Da, Db, Dc (Standards of Performance for New Stationary Sources)

This regulation is not applicable to the permitted source (Source-wide) because none of the boilers (excluding Boiler Group 2) are large enough to subject to NSPS

# **Section IV: ACID RAIN PROVISIONS.**

This source is not subject to Title IV. This section is not applicable.

## REVIEWER COMMENTS

This operating permit incorporates all applicable requirements contained in the following documents:

DAQE-AN0572013-04 dated April 28, 2004 DAQE-AN0572014-03 dated March 21, 2003

DAQE-664-99 dated August 25, 1999
DAQE-261-95 dated March 27, 1995
Utah SIP Section IX.H.2.b.BB dated
Utah SIP Section IX.H.2.b.Z dated

# 1. Comment on an item originating in DAQE-AN0572013-04 regarding Boiler Group 2 (Unit UPPG2)

Alternative Monitoring of sulfur content of coal: Kennecott requested and received an alternative testing plan for the sulfur content of the coal used at the Kennecott Utah Power Plant. The approval was issued in DAQC-1016-92 letter, dated August 21,1992. Therefore, the last sentence of that monitoring for that condition has a sentence that allows the alternative of relying on vendor data, as previously approved. [Comment last updated on 3/12/2004]

# 2. Comment on an item originating in AO DAQE-664-99 regarding permitted source (Sourcewide)

Conditions in AO DAQE-664-99: AO DAQE-664-99 is for the South and North Tailing Impoundment.

Condition #8 is a reporting requirement on the wind speed. This requirement is incorporated into a monitoring requirement under Provision II.B.11.b.1.

Condition #12 is incorporated into a monitoring under Provisions II.B.7.a.1, II.B.9.a.1, II.B.10.a.1, II.B.11.b.1, and II.B.8.d.1.

Condition #17 is incorporated into a reporting requirement under Provisions II.B.7.a.3, II.B.8.c.3, II.B.8.d.3, II.B.9.a.3, II.B.10.a.3, and II.B.11.b.3. [Comment last updated on 4/22/2003]

# 3. Comment on an item originating in AO DAQE-664-99 regarding permitted source (Sourcewide)

Condition#5 in AO DAQE-664-99: Condition #5 in AO DAQE-664-99 is the training requirement for permitted equipment in the Tailings Impoundment. However, there is no such equipment in the Tailing Impoundment. Therefore, the training requirement is not applicable and will not be carried over to this permit. [Comment last updated on 11/01/1999]

# 4. Comment on an item originating in AO DAQE-261-95 regarding Combined Analytical Laboratory (Unit CAL)

Monitor pressure drop: No pressure drop range has been established. This condition is useless and does not add any values to the permit. For that reason, the condition to continuously monitor the pressure drop across the scrubbers (condition #8) has not been carried over to this permit. [Comment last updated on 2/07/2000]

# 5. Comment on an item originating in AO DAQE-664-99 regarding permitted source (Sourcewide)

Provision II.B.1.e: This condition is for the point sources only. The emissions from fugitive dust and fugitive emission sources are covered by Provisions II.B.1.f and Provision II.B.1.g, respectively. [Comment last updated on 2/19/2002]

# 6. Comment on an item originating in AO DAQE-664-99 regarding permitted source (Sourcewide)

Condition#9 in AO DAQE-664-99: This condition shall apply to any point source or fugitive dust source, not fugitive emission source, because there are no fugitive emission sources at tailing impoundment. This condition is covered by source wide Provisions II.B.1.e and II.B.1.f. Therefore, Provision II.B.25.c in the Proposed Permit is redundant and is removed from the final permit. [Comment last updated on 2/24/2000]